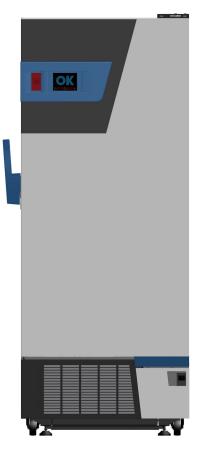
DATA SHEET TRUST | 690 L | -86°C



Reference
BMTRU69086

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	General specifications	
Raw volume	690 liters / 24.3 cu.ft 4 compartments	
Storage capacity	48 000 cryotubes 2mL	
Dimensions : externals (H x W x D) internals (H x W x D)	1990 x 875 x 970 mm / 78.4 x 38.2 x 34.5 in. 1436 x 630 x 752 mm / 56.6 x 29.6 x 24.8 in.	
Construction : external internal	Electrogalvanised steel with epoxy paint Stainless steel inner tank with rounded corners	
Insulation	6 faces Vacuum insulation panel (VIP) and high density polyurethane foam Thermal conductivity < 0.005 W/m/K	
Net weight	330 kg / 728 lb.	
Standard equipment	3 shelves (maximum weight per shelf: 75 kg / 165 lb) 4 swivel casters 2 levelling feet Key lock (2 keys supplied) 1 power cord, 3m long with IEC19 detachable connectors	
Working temperature	From +18°C (65°F) to +32°C (89°F)	
Indoor / outdoor use	For indoor use only	
Environment	Not designed for use in explosive atmospheres (ATEX)	
Noise level	56 dB	
Warranty	2 years5 years: fan, compressors, condenser10 years: VIP insulation	

	Refrigeration system
Cooling engine	2 stage compressors cascade system with intermediate plate heat exchanger Cold production by 5 internal walls
Expansion device	Capillary tube
Refrigerant load	1st stage : R417A / 2nd stage : R508B (non-flammable, without CFC and HCFC)*
Defrosting method	Manual with heated door-seal and heated valve pit



	Electric and electronic data	
Controller type	Fuji regulator and Schneider industrial automation	
Temperature probe	1 x Pt100 3 wires probe	
List of alarms	 Configurable high and low temperature alarm Open door alarm, triggered after 2 minutes opening Alimentation 230 VAC, overpressure CP1, battery charge failure, engine failure, CO₂/LN₂ injection in progress 	
Types of alarms	Visual (OK and pictograms) and acoustic with automatic reactivation after predefined delay	
Remote alarm contact	NO - NC dry contact (optional)	
Energy consumption	1500 W	
Types of power supply	 Voltage 230V ~ +/-10%, 50 Hz, fuse protection «aM 12A» Voltage 110V ~ +/-10%, 50/60Hz, fuse protection «aM 20A» Voltage 220V ~ +/-10%, 60Hz, fuse protection «aM 12A» 	

	Performances (ambient temperature : 22°C / 72°F)
Temperature range	From -60°C to -86°C, 1/10th degree display
Pull down from ambient to -86°C	~ 4 hours
Uniformity at -80°C	+/-5°C

Options and conformities		
Options	 Cryo-accumulators (from 6h to 8h additional autonomy) CO₂ / LN₂ backup system (150 bar max electrical valve) Additional Pt 100 ohms 3 wires Thermocouple K probe Circular chart recorder 4-20mA output COFRAC 9 points temperature mapping IQ / OQ documentation BoSS system NO - NC dry contact Padlock closure 	
Supplied with	User manualDetachable washable filterScraper	
Certification / Conformities	 EN61010-1 – Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements 2014/35/UE – Low voltage directive 2014/30/UE – EMC direcive, Class A device 97/23/CE – Under pressure devices 	

	Shipping
Shipping dimensions (H x W x D)	2150 x 940 x 1170 mm / 84.7 x 37 x 46.1 in.
Shipping weight	350 kg / 772 lb.
Type of package	Delivered on pallet with unloading ramp

Storage elements	
Full range of storage elements available	





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FROILABO freezers are designed in France and made in U.E.

The specifications and technical data presented in this datasheet are those in our possession on the date of emission. FROILABO reserves the right to make, without notice, any modifications to its products, specifications, colors, materials and technical data, or to interrupt the manufacture of the freezers.

Despite the care taken in its realization, this product sheet does not constitute a contractual document.